

child seat mounted on the seat.” (Office Action at p. 3). According to the PTO, it would have been obvious to one of ordinary skill in the art to modify Fujimoto to include a seat sensor that discriminates the type of passenger in order to properly control the deployment of the airbag. The PTO’s position is respectfully traversed.

Fujimoto discloses the use of a capacitance type proximity sensor 13 located in the seat back and a pressure type occupancy sensor 14 located in the seat cushion. The pressure type sensor 14 cannot discriminate between a person and an inanimate object. The capacitance type proximity sensor disclosed by Fujimoto can determine when an average build occupant is present in the seat. However, the proximity sensor cannot discriminate between a child leaning against the door and a child seat or other object. (Fujimoto at col. 8, lines 47-54). Thus, as admitted by the PTO, Fujimoto does not disclose a “means for discriminating the type of passenger.”

Fujita discloses pressure sensors 35 configured to measure a pressure distribution across the seat. (Col. 6, lines 46-51). However, the pressure sensors 35 are merely seat weight sensors. Fujita does not disclose that the sensors 35 can discriminate the type of passenger on the seat. For example, the sensors 35 disclosed by Fujita cannot differentiate between a 50-pound child and a 20-pound child seat holding a 30-pound infant. Furthermore, sensors 35 cannot differentiate between a 50 pound child leaning against the door and an inanimate object.

The pressure sensor 35 of Fujita detects the changes in pressure acting on the seat. Multiple pressure sensors are provided to detect the pressure distribution on the seat. The sensor does not function until an object sits on the seat. The sensor 35 disclosed by Fujita can only discriminate between two different passengers (e.g. adult and child) if an assumption is first made that the seat contains a human body. This determination cannot be made by the system disclosed by Fujimoto because, as mentioned above, Fujimoto cannot discriminate between a child leaning against the door and a child seat or other object on the seat. Thus, the sensor 35 of Fujita cannot be included in the system of Fujimoto to provide a means for discriminating the type of passenger on the seat.

Fujita also discloses a size sensor 47. The size sensor 47 is an ultrasonic sounding device that measures the return of an ultrasonic wave to detect a height of a passenger on a seat. (Fujita at col. 9, lines 57-63). However, similar to the pressure sensor 35, the size sensor 47 cannot discriminate between an inanimate object and a human body. Thus, the sensor 47 cannot be included in the system of Fujimoto to provide a “means for discriminating the type of passenger” on a seat.

Therefore, claims 1, 9 and 10 are not rendered unpatentable by the combination of Fujimoto and Fujita and the rejection should be withdrawn.

In addition, the stated motivation for combining the references (i.e., “to have a seat sensor that discriminates the passenger on a seat to properly control the deployment of the airbag”) is insufficient. As demonstrated above, Fujita does not disclose a “sensor that discriminates the passenger on a seat”. Therefore, one of ordinary skill in the art would not be motivated to modify Fujimoto as suggested in the Office Action. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 2-8 depend from claim 1 and are allowable therewith, for at least the reasons set forth above, without regard to the further patentable limitations contained in these dependent claims.

With regard to claim 2, Fujimoto only discloses the use of a single proximity sensor. The PTO contends that it would have been obvious to include a plurality of proximity sensors. This contention is respectfully traversed. The Examiner has failed to establish a *prima facie* case of obviousness. In order to establish a *prima facie* case of obviousness the PTO must demonstrate that there is some suggestion or motivation to modify Fujimoto to include a plurality of proximity sensors. The PTO has failed to provide any motivation or suggestion. Instead, the Office Action contains an unsupported statement that “it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.” This statement is not sufficient to support a *prima facie* case and the rejection should be withdrawn. Furthermore, Applicants note that claim 2 provides a solution to the shortcomings of the system disclosed in Fujimoto, which cannot detect a small-built occupant leaning against the door. Claim 2 calls for a “first human body proximity sensor

[that] detects the proximity of the human body when the passenger is seated in a posture leaning against the door.” Thus, claim 2 is directed to a specific improvement over the prior art that provides for improved operation of the passenger discriminatory apparatus. The cited references fail to disclose a suggestion of motivation for the claimed improvement. Thus, the rejection should be withdrawn. Reconsideration and withdrawal of the rejection is respectfully requested.

With regard to claim 3, the rejection should be withdrawn, because Fujimoto does not disclose the claimed limitation. The Office Action states that “the means for determining is configured to determine that there is no passenger when the output of the seat weight sensor is not more than a first threshold value.” The disclosure of Fujimoto shown that this statement is not correct. Fujimoto teaches that even when the seat pressure sensor is less than a prescribed value and indicates that there is no passenger in the seat, the proximity sensor is still considered before making a final determination. (Fujimoto at col. 13, lines 26-30). Thus, Fujimoto does not disclose the claimed invention and the rejection should be withdrawn.

Claims 4-8 contain similarly patentable limitations. Reconsideration and withdrawal of the rejection is respectfully requested.

Conclusion

In view of the foregoing, Applicant submits that the application is in condition for allowance. An early Notice of Allowance is respectfully requested. If there are any questions regarding the prosecution of this application, the Examiner is invited to contact the undersigned attorney at the phone number listed below.

Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted

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